

Remarks

Claims 1, 9 and 11 to 14 are amended, claim 8 is cancelled and claim 15 is added. Claims 1 to 7 and 9 to 15 are pending in this application of which claims 1 and 15 are in independent form.

Applicants' attorney thanks Examiner Fulton for the personal interview held on March 1, 2005 at which time a draft amendment of claim 1 was presented. It was mutually agreed that the draft amendment patentably distinguishes the invention over Ruck et al and claim 1 is amended herein precisely as presented at the interview. Also, the finality of the action was withdrawn because Ruck et al does not disclose a friction-force damping mechanism and therefore cannot anticipate the applicants' invention.

Claim 1 was also rejected under 35 USC 103(a) as being unpatentable over Scarrott et al in view of Ruck et al. The following will show that claim 1, as amended, patentably distinguishes the invention over this combination of references.

On page 3 of the action, Scarrott et al is described as disclosing a probe head comprising a yielding part 12 and additional parts as listed in the action.

Applicants respectfully disagree with the characterization of Scarrott et al presented in the action and note that this reference is directed to a frictional coupling device wherein a first rotatable member can be coupled to a second member. This reference bears no relationship to a probe head for a coordinate

measuring apparatus. The frictional coupling device of Scarrott et al also suggests no plurality of measuring systems for measuring the deflection of the yielding part in respective directions as defined in applicants' claim 1. In addition, the frictional coupling device is not a damping device for damping a yielding part which deflects in a pre-given direction. On the one hand, the frictional coupling device functions to couple the rotatably journaled shaft 12 to the remainder of the component and performs no damping function and, on the other hand, there is no pre-given direction with the rotation about an axis because there is no movement in a specific direction of a yielding part.

It is not seen how the frictional coupling device of Scarrott et al can be combined with the subject matter of Ruck et al to arrive at the applicants' invention.

In the action, the damping device of Ruck et al is characterized as an electromagnetic friction brake. Examiner Fulton and applicants' attorney mutually agreed that the damping device of Ruck et al can not be a friction brake because no friction forces are generated. Instead, the damping devices of Ruck et al are electromagnetically operating plunge coil devices. By definition, friction forces occur when two parts rub one against the other and this is not the case in Ruck et al. Accordingly, and from a study of Ruck et al, it is not possible for our person of ordinary skill to hit upon the idea of utilizing friction forces to effect a damping of the yielding part. Applicants have amended claim 1 to emphasize that the damping device generates a friction force between two surfaces to effect the damping of the yielding part in a pre-given direction

with the clause:

"said damping device including at least one friction brake for generating a friction force between two surfaces to effect said damping of said yielding part in said pre-given direction with said friction force being electrically changeable;" (emphasis added)

From the above, it can be seen that there is no hint in either reference which could lead our person of ordinary skill to the other reference so that it is not possible for our artisan to combine these two references.

With respect to Scarrott et al, applicants note that there is no discussion anywhere in this reference of providing a damping action. Scarrott et al is simply a frictional coupling device used for coupling a first rotatable member to a second member, for example, as in a transmission clutch.

In Ruck et al, there is no suggestion of a friction brake generating a friction force between two surfaces so that there is nothing in Ruck et al which could trigger our artisan's thinking to seek out a damping device incorporating a friction brake.

Thus, with no thread connecting these references to each other, it is not seen how our person of ordinary skill would possibly want to combine the same. Even if our artisan force fitted Scarrott et al into Ruck et al, our artisan would have simply a probe head equipped with a rotational frictional coupling device not capable of providing a damping function of a yielding part in a predetermined direction.

In view of the above, applicants submit that claim 1, as amended, patentably distinguishes the invention over the combination of Scarrott et al and Ruck et al and should now be

allowable. Claims 2 to 7 and 9 to 14 are all dependent from claim 1 so that these claims should likewise be allowable.

Claim 15 is added to provide an additional definition of the invention and is somewhat narrower than claim 1 so that this claim too should be allowable.

Reconsideration of this application is earnestly solicited.

Respectfully submitted,



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